

## **CLAIMS:**

We claim:

1. A method for the manufacture of a free standing nanoparticle, the method comprising:
  - 5 a. providing a planer substrate;
  - b. causing deposition of a layer of material on said surface;
  - c. placing a mask over said material coated substrate, said mask comprising a plurality of cylindrical posts and prepared by the method comprising:
    - 10 i) providing a resist-coated substrate;
    - ii) exposing a pattern on said resist-coated substrate using a photolithographic technique;
    - iii) developing said pattern; and
    - iv) etching said pattern;
  - d. releasing said nanoparticles from the surface of said substrate.